THE MINERAL INDUSTRY OF

LIBYA

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The hydrocarbon sector of the Great Socialist People's Libyan Arab Jamahiriya, which included natural gas, crude oil, and refined petroleum products, dominated the mineral industry of the country. With production of about 502 million barrels in 2002, this North African nation was the second largest crude oil producer in Africa after Nigeria. Libya's oil reserves, which were estimated to be about 29.5 billion barrels, were the largest on the African continent. The nation's natural gas reserves were about 1.3 trillion cubic meters, which ranked Libya fourth in Africa, after Algeria (4.5 trillion cubic meters), Nigeria (3.5 trillion cubic meters), and Egypt (1.7 trillion cubic meters) (Radler, 2002; U.S. Energy Information Administration, 2003a§[1]-c§). Other mineral and mineral-based commodity production included ammonia and urea, cement, clay, dolomite, gypsum, lime, limestone, methanol, salt, sand, and crushed stone for the construction industry, and sulfur recovered as a byproduct of gas and oil processing.

In 2002, Libya had a population estimated to be about 5.4 million. According to the International Monetary Fund (IMF) (2003a§), the nominal gross domestic product (GDP) of Libya was $18.7 billion. The GDP at purchasing power parity exchange rates was estimated by the IMF (2003b§, c§) to be $83 billion in 2002, which was significantly higher than the U.S. Central Intelligence Agency's (2003§), (which used a different purchasing power parity calculation) estimate of $41 billion for 2002.

Government Policies and Programs

In 2002, an economic cooperation agreement with Saudi Arabia and official visits to Libya by the Australian Minister for Trade, the British Parliamentary Under-Secretary for Foreign and Commonwealth Affairs, the Canadian Secretary of State for Latin America and Africa, the Czech Republic's Vice Minister for Industry and Trade, the French Minister of Foreign Affairs, the Greek Deputy Minister of Foreign Affairs, the President of the People's Republic of China, and the Prime Ministers of Italy and Malaysia were part of the thaw in official relations associated with the suspension of the United Nations' (U.N.) economic sanctions against Libya in 1999. The Libyan Government inaugurated an economic plan to attract more foreign companies to its oil industry and to diversify its economy with international investment in the electricity, industrial, infrastructure, and tourism sectors. The Government also was actively pursing the total elimination of the U.N. sanctions against the country, the end of unilateral commercial sanctions imposed by the United States, and its removal from the U.S. Department of State's list of Governments that were sponsors of terrorism (U.S. Department of State, 2003, p. 80).

In 2002, the Libyan Government allegedly offered a $2.7 billion settlement to the families of those that had flown on Pan Am flight 102 (which was destroyed over Lockerbie, Scotland, United Kingdom, in 1988) contingent on the lifting of U.N. and U.S. sanctions (Koppel, Labott, and Ahlers, 2002§). The U.N. sanctions alone reportedly had cost Libya more than $24 billion since 1992 (Trade Partners UK, 2002§). In 2001, the U.S. Government had continued its economic sanctions against Libya through 2006 with Public Law 107-24. The United States had banned imports of Libyan crude oil with Presidential Proclamation 4907 in 1982 and had originally imposed an embargo on Libya in 1986 and enforced under the Libyan sanctions regulations (31 CFR part 550).

Trade

In 2002, Libyan exports, primarily crude oil and petroleum products, were valued at $11.8 billion. Exports were shipped or piped to Italy (which received 43% of total exports), Germany (20%), and Spain (12%). Hydrocarbons accounted for more than 90% of the country's export revenues. Imports were valued at $6.3 billion (Libyen-news.de, 2003§; U.S. Central Intelligence Agency, 2003§).

Commodity Review

With the exception of state-owned Libyan Iron and Steel Co. (LISCO), which primarily was supplied by imported raw materials, the nation's nonfuel mineral industry sector only made a minor contribution to the economy. In 2002, the Islamic Development Bank (2002§) approved a $42.93 million loan to LISCO for the modification of three electric arc furnaces of Steel Melt Shop No. 1 and installation of an additional ladle furnace at LISCO's Misurata plant.

Cement.—F.L. Smidth A/S of the Denmark won the contract, which was estimated to be worth about $157 million, to build a clinker production line at Zliten for the Arab Cement Co. The proposed 1.5-million-metric-ton-per-year line was scheduled to be completed in 2005 and would comply with European dust emission standards. In 2002, Arab Cement Co. also commissioned a study to determine how to bring its plants up to international emissions standards. The company reported that the suspended U.N. sanctions

[1]References that include a section mark (§) are found in the Internet References Cited section.

impeded its ability to acquire spare parts and make emissions improvements for its plants at Al Margab, Libda, Souk el Khamis, and Zliten (World Investment News, 2002§).

Natural Gas and Oil.—Exploration by international oil companies was expected to increase significantly, given the intensity of international exploration company interest and the extensive under explored areas in the country (Petroleum Economist, 2003, p. 9; Rusk, 2000). Negotiations continued for the exploration of the blocks that had been offered to investors in 2000.

In Spain, the development of facilities for offshore block NC-137 for Cie. des Pétroles Total Libye, National Oil Company (NOC) of Libya, and Wintershall AG of Germany continued with the launching of the Farwah, which was a 900,000-barrel-storage-capacity floating production, storage, and offloading vessel (FPSO). The FPSO was scheduled to arrive in Libya in January 2003 (Oil & Gas Journal, 2002a). Work also progressed on the Elephant Field on block NC-174 that was operated by Eni S.p.A. The field is expected to be producing in 2004.

ONGC Videsh Ltd. of India acquired 49% interest in the MM block and in block 24 from the Turkish Petroleum Overseas Company (TPOC). In 2002, TPOC had acquired new seismic surveys and had evaluated existing seismic data on its blocks. ONGC Videsh was expected to acquire and process additional seismic data in 2003.

U.S. sanctions had forced the Oasis Group [Amerada Hess Corp., ConocoPhillips (formerly Conoco Inc.), Marathon Oil Corp., and Occidental Petroleum Corp. (Oxy)] to withdraw from Libya in 1986. The Oasis Group concessions have been maintained by state-owned Waha Oil (a subsidiary of NOC) and the Oxy concessions by state-owned Zueitina Oil (a subsidiary of NOC). After the threatened cancellation of their concession licenses, the four American companies were authorized in 2002 to renegotiate terms with the Libyan Government (Hesseldahl, 2002§). The Libyan Government reportedly received an estimated $100 million per year from the concession operations (Crocker and Nelson, 2003, p. 14).

A fire in the petrochemical complex at the Ras Lanuf refinery closed the refinery for 4 days in March. In May, the contract for the renovation of the Az Zawiya refinery was awarded to LG Engineering and Construction of the Republic of Korea; however, LG's failure to receive payment for the project in July 2002 resulted in the termination of the contract in 2003.

Hydrocarbon infrastructure projects under construction included a $700 million, 6.66 billion cubic meter-per-year-capacity natural gas treatment plant at Mellitah, which was scheduled to be completed in mid-2005 (Oil & Gas Journal, 2002b; Eni S.p.A., 2002§); the 8 billion-cubic-meter-per-year-capacity Greenstream pipeline from Melitah, Libya to Gela, Sicily, which was expected to be completed by late 2005 (Africa Energy Intelligence, 2003); and the long-delayed 154-km oil pipeline from Al Khums to Tripoli by Zarubezhneftegazstroy of Russia (Africa Energy Intelligence, 2002).

In 2002, the Governments of Egypt and Libya established the Arab Oil and Gas Pipelines Co. The new company proposed to build a $20 million pipeline system to transport Libyan crude oil to Egypt and Egyptian natural gas to Libya (ArabicNews.com, 2002§). China Petroleum Pipeline Bureau and China Petroleum Engineering Construction Co. Ltd. (which were subsidiaries of the China National Petroleum Corp.) were awarded the $230 million contract to build a 527-km oil pipeline and an adjacent gas pipeline from Wafa to Melitah by 2004 (Schlumberger Ltd., 2002§).

Additional information on the oil and gas sector can be found in the U.S. Energy Information Administration's July 2003 country analysis brief for Libya at URL http://www.eia.doe.gov/emeu/cabs/libya.html.

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TABLE 1

LIBYA: ESTIMATED PRODUCTION OF MINERAL COMMODITIES[1]

(Thousand metric tons unless otherwise specified)

Commodity[2]		1998	1999	2000	2001	2002
Cement, hydraulic		3,000	3,000	3,000	3,000	3,300
Gas, natural:						
Gross	million cubic meters	12,600	9,200 r	11,000 r	11,400 r	11,000
Dry	do.	5,800	5,200 r	5,400	5,600 r	5,700
Gypsum		150	150	175	150	150
Iron and steel, metal:[3]						
Direct-reduced iron[3, 4]		1,010	1,330	1,500	1,090	1,170
Crude steel[3]		925	945	1,055	846	886
Lime		275	270	270	250	250
Nitrogen:[3]						
N content of ammonia		545	552	552	495	533
N content of urea		408	386	407	365	400
Petroleum:						
Crude	thousand 42-gallon barrels	540,000	520,000	538,000	520,000	502,000
Refinery products:						
Gasoline	do.	16,800	10,000	12,000	12,000	12,000
Kerosene and jet fuel	do.	12,700	7,000	8,400	8,400	8,400
Distillate fuel oil	do.	31,800	20,000	24,000	24,000	24,000
Residual fuel oil	do.	33,600	25,000	30,000	30,000	30,000
Other	do.	20,000	13,000	15,600	15,600	15,600
Total	do.	115,000	75,000	90,000	90,000	90,000
Salt		30	30	40	40	40
Sulfur, byproduct of petroleum and natural gas		13	13	13	15	15

[r]Revised.

[1]Table includes data available through August 29, 2003. Estimated data are rounded to no more than three significant digits; may not add to totals shown.

[2]In addition to the commodities listed, a variety of brick, clay, dolomite, limestone, methanol, sand, crushed construction stone, and tile was produced, and natron (soda ash) may have been produced, but available information is inadequate to make estimates of output levels. Natural gas liquids also were produced but were blended with crude petroleum and reported as part of that total.

[3]Reported figure.

[4]Includes hot briquetted iron.